



**KING COUNTY
FLOOD CONTROL
DISTRICT**

KING COUNTY FLOOD CONTROL DISTRICT

King County Courthouse
516 Third Avenue
Room 1200
Seattle, WA 98104

Signature Report

FCD Resolution FCD2023-06

Proposed No. FCD2023-06.2

Sponsors

1 WHEREAS, the King County Flood Control Zone District ("District") adopted its
2 2023 work program, budget, operating budget, capital budget, and six-year capital
3 improvement program with Resolution FCD2022-13, and

4 WHEREAS, the annual carry-forward budget resolution is necessary to provide
5 budget authority for unspent appropriations from the prior year and to reinstate contract
6 encumbrances, and

7 WHEREAS, the carry-forward amount for unspent appropriations from 2022 to
8 2023 is \$259,562,915, and

9 WHEREAS, pursuant to RCW 86.15.140, the District held a public hearing on the
10 proposed carry-forward amount and a supplemental budget on June 13, 2023, and

11 WHEREAS, pursuant to RCW 86.15.110, the board of supervisors ("Board") has
12 determined that the flood control improvements adopted by this resolution generally
13 contribute to the objectives of the District’s comprehensive plan of development, and

14 WHEREAS, the Board desires to adopt amendments to the District’s 2023
15 budget, operating budget, capital budget, and six-year capital improvement program;

16 NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF
17 SUPERVISORS OF THE KING COUNTY FLOOD CONTROL ZONE DISTRICT:

18 SECTION 1. The Board adopts a revised 2023 budget for the District, as set forth
19 in Attachment B to this resolution, titled "2023 Reallocation Budget May 11, 2023," and

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20 amends Section 1 of FCD2022-13 accordingly.

21 SECTION 2. The Board adopts a revised 2023 operating budget for the District,
22 as set forth in Attachment C to this resolution, titled "2023 Reallocated Operating Budget
23 May 11, 2023," and amends Section 1 of FCD2022-13 accordingly.

24 SECTION 3. The Board adopts a revised 2023 capital budget for the District,
25 consisting of the projects and expenditures as set forth in Attachment D to this resolution,
26 titled "2023 Reallocated Capital Budget May 11, 2023," and amends Section 1 of
27 FCD2022-13 accordingly.

28 SECTION 4. The Board adopts a revised six-year capital improvement program
29 for the District, as set forth in Attachment E to this resolution, titled "2023-2028
30 Reallocated Six-Year CIP May 11, 2023," and amends Section 1 of FCD2022-13
31 accordingly.

32 SECTION 5. The Board adopts a revised 2022-2027 capital budget project list, as
33 set forth in Attachment H to this resolution, titled "2023-2028 Six-Year CIP Project
34 Allocations + Carryover May 11, 2023," and amends Section 1 of FCD2022-13
35 accordingly.

36 SECTION 6. The Board desires to continue its partnership with the City of
37 Bellevue on the 148th Ave SE Larsen Lake Bellevue Project and increases the project
38 budget by \$138,500 to a total project budget of \$538,500.

39 SECTION 7. The Board desires to partner with the City of Seattle (Seattle), as its
40 service provider, to create a South Park Interim Flood Preparedness and Emergency
41 Response Program (Program). The Program cost is \$1,551,000 and shall include: (1)
42 \$1,296,000 for the installation and maintenance of a temporary flood barrier in the South

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43 Park neighborhood. The allocation of the \$1,296,000 is as follows, (i) \$546,000 to
44 purchase six pumps by December 31, 2023, (ii) \$110,000 to purchase an operations
45 staging trailer by December 31, 2023, and (iii) \$640,000 to provide project management
46 and oversight including store, stage and demobilize the temporary equipment and
47 supplies for the temporary flood barriers; operate the pumps, deploy community
48 sandbags, obtain street use permits; (2) \$225,000 for culturally appropriate public
49 education and outreach of the flood risk in the South Park neighborhood and engage
50 residents to provide input into near and long-term flood risk reduction strategies; and (3)
51 \$30,000 for the development of South Park specific communication materials to increase
52 an understanding of the flood risks in the South Park neighborhood. These materials will
53 be developed in partnership with the community and will be produced in multiple
54 languages.

55 SECTION 8. The Board directs King County to review the feasibility and
56 develop recommendations to expand the King County Flood Warning Program to include
57 forecasted King Tide events on the Duwamish River by October 1, 2024. This report
58 shall include (1) the cost associated with an expansion to the King County Flood Warning
59 Program to include forecasted King Tide events on the Duwamish River, (2) potential
60 flood phases on the Duwamish River as the result of forecasted King Tide events, (3)
61 potential flood patrol routes along the Duwamish River in the event of forecasted King
62 Tide events, (4) whether King County would open the King County Flood Warning
63 Center as the result of flooding along the Duwamish River as a result of a forecasted
64 King Tide event, and (5) a timeline to implement an expansion of the King County Flood

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65 Warning Program to include forecasted King Tide events on the Duwamish River. This
66 report shall be transmitted to the District by October 15, 2023.

67 SECTION 9. The Board desires to partner with the City of Snoqualmie
68 ("Snoqualmie") by contributing \$3,000,000 of District funds to the purchase of 15 parcels
69 located in Snoqualmie provided that (i) the District contribution to each parcel does not
70 exceed 75% of the purchase price, (ii) the District contribution to each parcel shall not
71 exceed \$600,000, (iii) Snoqualmie places conservation easements on those parcels; and
72 (iv) Snoqualmie purchases the parcels by December 31, 2028. The 15 parcels are: parcel
73 numbers 7850200060, 7849200060, 7849200055, 7849200041, 7849200040,
74 7849200064, 7849200425, 7849200450, 7849200455, 7849200460, 5417600175,
75 5417600210, 5417600215, 5417600225, and 7849200025.

76 SECTION 10.

77 A. The Board authorizes the extension, enlargement, acquisition or construction
78 of improvements, as applicable, as set forth on Attachments B, C, D, E and H of this
79 resolution.

80 B. The 2006 King County Flood Hazard Management Plan ("Flood Plan"), as
81 amended, serves as the comprehensive plan of development for flood control and
82 floodplain management, and has been prepared for the streams or watercourses upon
83 which the improvements will be enlarged, extended, acquired or constructed. The
84 improvements authorized herein generally contribute to the objectives of the Flood Plan.

85 C. For improvements that are to be constructed, preliminary engineering studies
86 and plans have been made, consisting of one or more of the following: the 2006 Flood
87 Plan, as amended, preliminary feasibility analyses, conceptual designs and design

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88 manuals, and such plans and studies are on file with the county engineer.

89 D. Estimated costs for acquisitions and improvements together with supporting

90 data are set forth on Attachments B, C, D, E and H.

91 E. The improvements set forth in Attachments B, C, D, E and H are determined

92 to benefit the county as a whole, as well as the zone.

93

94

FCD Resolution FCD2023-06 was introduced on 5/17/2023 and passed as amended by the King County Flood Control District on 7/11/2023, by the following vote:

Yes: 9 - Balducci, Dembowski, Dunn, Kohl-Welles, McDermott, Perry, Upthegrove, von Reichbauer and Zahilay

KING COUNTY FLOOD CONTROL DISTRICT
KING COUNTY, WASHINGTON

DocuSigned by:




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Reagan Dunn, Chair

ATTEST:

DocuSigned by:



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Russell Pethel, Clerk of the District

Attachments: B. FCD 2023 Reallocation Budget 5.12, C. FCD 2023 Operating Budget 5.12, D. FCD 2023 Capital Budget 5.12, E. FCD 2023 Six Year CIP 5.12, H. FCD 2023 Capital Project List 5.12

King County Flood Control District

2023 Reallocation Budget

Attachment B

May 11, 2023

Program	2023 Approved	2022 Carryover	2023 Reallocation	2023 Revised
Flood District Administration	\$2,488,637	\$0	\$0	\$2,488,637
Maintenance and Operation	\$15,808,156	\$254,000	\$0	\$16,062,156
Construction and Improvements	\$47,656,893	\$259,562,915	(\$45,469,541)	\$261,750,267
Bond Retirement and Interest	\$0	\$0	\$0	\$0
Total	\$65,953,686	\$259,816,915	(\$45,469,541)	\$280,301,060
Projected Capital Reserves - Cash Fund Balance ¹	\$35,994,288			\$23,578,207
Projected Capital Reserves - Budgetary Fund Balance ²	(\$223,271,246)			(\$184,488,889)

¹ The cash fund balance assumes an expenditure rate of 21% of the capital budget in 2023, informed by prior year actuals.

² The budgetary fund balance assumes 100% expenditure of all budgeted amounts and is used to understand budgetary commitment.

King County Flood Control District

2023 Reallocated Operating Budget **Attachment C**

May 11, 2023

	2023 Approved	2022 Carryover	2023 Revised	Comments
Annual Maintenance	\$2,836,298		\$2,836,298	
Flood Hazards Plan, Grants, Outreach	\$982,429	\$254,000	\$1,236,429	Carryover expenditure authority for the Flood Plan Update.
Flood Hazard Studies, Maps, Technical Services	\$2,786,712		\$2,786,712	
Flood Preparation, Flood Warning Center	1,291,336		\$1,291,336	
Program Management, Supervision, Finance, Budget	\$2,006,077		\$2,006,077	
Program Implementation	\$2,015,876		\$2,015,876	
Overhead / Central Costs*	3,889,428		\$3,889,428	
Total	\$15,808,156	\$254,000	\$16,062,156	

* A portion of these overhead costs are reimbursed by the capital fund for staff time loaned out to capital projects.

King County Flood Control District

2023 Reallocated Capital Budget

Attachment D

May 11, 2023

Basin	Acquisition	Design	Construction	Contingency	Total
Snoqualmie River Basin	\$9,003,982	\$7,444,189	\$14,396,660	\$0	\$30,844,831
Cedar River Basin	\$5,383,725	\$6,336,049	\$26,770,532	\$0	\$38,490,306
Green River Basin	\$26,832,036	\$39,544,324	\$23,892,081	\$0	\$90,268,441
White River Basin	\$684,806	\$1,566,597	\$446,790	\$0	\$2,698,193
Effectiveness Monitoring	\$0	\$1,168,756	\$0	\$0	\$1,168,756
Countywide Miscellaneous	\$0	\$0	\$3,500,000	\$1,300,000	\$4,800,000
Opportunity Fund	\$0	\$0	\$25,081,811	\$0	\$25,081,811
Grant Funds	\$0	\$0	\$68,397,929	\$0	\$68,397,929
Total	\$41,904,549	\$56,059,915	\$162,485,803	\$1,300,000	\$261,750,267

King County Flood Control District

2023 - 2028 Reallocated Six-Year CIP

Attachment E

May 11, 2023

Name	2023 Approved	2022 Carryover	2023 Reallocation	2023 Revised	2024	2025	2026	2027	2028	2023 - 2028 Total
Snoqualmie River Basin	\$12,509,010	\$24,717,782	(\$6,381,961)	\$30,844,831	\$16,944,783	\$31,759,929	\$29,904,415	\$26,937,329	\$22,991,954	\$159,383,241
Cedar River Basin	\$13,737,117	\$35,016,089	(\$10,262,900)	\$38,490,306	\$8,658,296	\$9,850,335	\$3,748,000	\$3,200,000	\$13,700,000	\$77,646,937
Green River Basin	(\$16,600,477)	\$132,506,046	(\$25,637,128)	\$90,268,441	\$54,915,584	\$111,295,876	\$31,216,699	\$8,975,367	\$11,652,427	\$308,324,394
White River Basin	\$4,173,844	\$1,152,741	(\$2,628,392)	\$2,698,193	\$4,503,700	\$5,567,310	\$4,226,735	\$251,436	\$1,394,870	\$18,642,244
Effectiveness Monitoring	\$633,839	\$958,070	(\$423,153)	\$1,168,756	\$1,019,320	\$832,410	\$850,660	\$638,080	\$963,850	\$5,473,076
Countywide Miscellaneous	\$3,700,000	\$1,236,007	(\$136,007)	\$4,800,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$5,800,000
Subregional Opportunity Fun	\$6,023,427	\$19,058,384	\$0	\$25,081,811	\$6,095,244	\$6,166,947	\$6,238,700	\$6,309,405	\$6,381,180	\$56,273,287
Flood Reduction Grants	\$23,480,133	\$44,917,796	\$0	\$68,397,929	\$24,321,176	\$25,192,345	\$26,094,718	\$27,029,414	\$27,997,590	\$199,033,172
Total	\$47,656,893	\$259,562,915	(\$45,469,541)	\$261,750,267	\$116,658,102	\$190,865,152	\$102,479,927	\$73,541,031	\$85,281,871	\$830,576,351

2023 - 2028 Six-Year CIP Project Allocations + Carryover
Attachment H

May 11, 2023

No.	Title	Basin	Type of project	2022 Inception to Date Budget	2022 Inception to Date Expendiure	2023 Adopted	2022 Carryover	2023 Reallocation Request	2023 Revised	Project Life Total	Comments
1	WLFL0 SF SKYKMSH REP LOSS MIT	SF Skykomish	FCD Acqu/Elev	\$5,600,486	\$3,177,614	\$578,555	\$2,422,872	\$0	\$3,001,427	\$10,179,041	Baring. This project will elevate or buyout individual structures in the South Fork Skykomish Basin to eliminate the risk of flooding or erosion damage during future flood events.
2	WLFL0 TIMBER LN EROSN BUYOUTS	SF Skykomish	FCD Acqu/Elev	\$2,812,095	\$1,972,649		\$839,446	\$0	\$839,446	\$6,812,095	Skykomish. This project will continue to acquire and remove homes along a stretch of the Skykomish River that are endangered by erosive forces as well as inundation in some places.
3	WLFL0 TIMBERLANE 2019 REPAIR	SF Skykomish	FCD Const	\$553,246	\$567,117		(\$13,871)	\$13,871	\$0	\$567,117	Skykomish. Revetment is approximately 300 LF along left bank of South Fork Skykomish River. Unstable section of vertical stacked rock is approximately 150 LF (needs verification). Failure has occurred previously in this section of revetment.
4	WLFL1 BENDIGO UPR SETBACK N BEND	Upper Snoq	Agreement	\$50,000	\$2,621		\$47,379	\$0	\$47,379	\$4,250,000	North Bend. Cost-share of \$8.4M levee setback project. The levee overtops at a 20-year or greater flood, inundating undeveloped property, railway lines and roadways. Project would reconnect 25 acres of floodplain and construct a new levee that meets current engineering guidelines. City has submitted grant application for the remaining \$4.2 million.
5	WLFL1 CIRCLE RVR RANCH RISK RED	Upper Snoq	FCD Const	\$1,189,922	\$1,195,360		(\$5,438)	\$357,878	\$352,440	\$1,951,542	North Bend. This project will determine a preferred action to reduce long term risks from channel migration in the Circle River Ranch Neighborhood on the South Fork Snoqualmie River. Being conducted concurrent with South Fork Snoqualmie Corridor Plan.
6	WLFL1 MASON THORSON ELLS 2022 REPAIR	Upper Snoq	FCD Const	\$155,000	\$56,225		\$98,775	\$50,000	\$148,775	\$205,000	Provide 20% local match to repair erosion to the downstream end of the Mason Thorson Ells levee under the US Army Corps of Engineers (USACE) PL 84-99 Levee Rehabilitation and Inspection Program (RIP). The downstream 60-feet of the levee was damaged during the February 2020 flood event and the proposed project will repair the damage and reduce future erosion risk to the facility.
7	WLFL1 MF FLOOD CONVEYANCE N BEND	Upper Snoq	Agreement	\$300,000	\$0	\$1,500,000	\$300,000	\$0	\$1,800,000	\$1,800,000	North Bend. Overflow channels originating from the Middle Fork Snoqualmie River flow through neighborhoods and cross roads creating risk to homes and infrastructure. Potential solutions include channel modifications, enhancements, and culvert improvements.
8	WLFL1 MF RESIDENTIAL FLD MTGNT	Upper Snoq	FCD Acqu/Elev	\$2,292,231	\$20,030	\$1,712,231	\$2,272,201	(\$2,272,201)	\$1,712,231	\$11,732,261	North Bend. Work with willing sellers to acquire eighteen homes at risk from channel migration along the Middle Fork (Project E in the draft Capital Investment Strategy)
9	WLFL1 NF CONFLUENCE REVETMENT REMOVAL	Upper Snoq	FCD Const				\$0	\$128,356	\$128,356	\$128,356	North Bend: Remove the rock revetment located on the left bank of the North Fork Snoqualmie River upstream from its confluence with the Middle Fork Snoqualmie River to restore habitat and better allow for natural river processes to function in the project vicinity and avoid long-term costs of inspecting and maintaining the facilities.
10	WLFL1 NF SNOQUALMIE RES FLD MIT	Upper Snoq	FCD Acqu/Elev	\$2,000,000	\$53	\$2,000,000	\$1,999,947	(\$1,999,947)	\$2,000,000	\$12,000,053	Acquire flood-prone properties in the North Fork Snoqualmie basin to reduce the risk of flood, erosion, and channel migration damage and secure footprints for future capital projects.
11	WLFL1 NORMAN CREEK DS CULV	Upper Snoq	Agreement	\$724,000	\$722,080		\$1,920	\$0	\$1,920	\$724,000	North Bend. Replace two existing rusted out 48" corrugated metal pipes on Norman Creek under 428th Ave SE with a new precast concrete box culvert. The new culvert will reduce the time it takes to drain the flood waters off of private property by increasing the capacity of the crossing. Currently when the North Fork Snoqualmie River overflows water backs up against 428th and impedes use of the roadway as the Norman Creek crossing is the normal outflow for this flood water once the North Fork has overtopped the adjacent levees.
12	WLFL1 NORMAN CREEK US 2024 CULV	Upper Snoq	Agreement	\$0	\$0	\$350,000	\$0	\$0	\$350,000	\$1,100,000	North Bend. Improve SE 92nd Street, east of 428th Street, and alleviate roadway flooding by installing a new box culvert.
13	WLFL1 NORTH FORK BRIDGE FEASIBILITY	Upper Snoq	Agreement	\$464,583	\$419,069		\$45,514	\$0	\$45,514	\$464,583	North Bend. Initiate feasibility study to mitigate the risk of scour damage to the North Fork Bridge by retrofitting the existing structure with deep foundations or alternative risk mitigation strategies.
14	WLFL1 RECORD OFFICE 2016 REPAIR	Upper Snoq	Agreement	\$3,883,278	\$3,394,709		\$488,569	\$0	\$488,569	\$3,883,278	Snoqualmie. Repair downstream 200 lineal feet of facility which is missing face rock and toe rock. A significant scour hole has formed around a City of Snoqualmie stormwater outfall pipe at the downstream end of facility. Potential erosion impact to Park Ave SE in City of Snoqualmie, an area included in the City's planned "Riverwalk" park and trail project. Project implemented by City of Snoqualmie as part of Riverwalk project, construction is scheduled for 2021.
15	WLFL1 REIF RD LEVEE IMPROVEMENTS	Upper Snoq	FCD Const	\$67,000	\$0		\$67,000	\$0	\$67,000	\$1,427,000	North Bend. Conduct a feasibility study to determine ways of preventing the overtopping of the Reif Rd Levee. Potential solutions include: repair and/or raise levee in place / setback levee / gravel removal / home elevations.
16	WLFL1 REINIG RD RVTMNT 2016 REPAIR	Upper Snoq	FCD Const	\$6,871,008	\$6,823,548	\$20,000	\$47,460	\$0	\$67,460	\$6,891,008	North Bend. Repair three primary damage sites just upstream and directly across from the South Fork Snoqualmie confluence totaling ~285 lineal feet. Construction is anticipated in 2021.
17	WLFL1 RIBARY CREEK	Upper Snoq	Agreement	\$952,660	\$27,664		\$924,996	\$0	\$924,996	\$7,121,653	North Bend. Address flooding from Ribary Creek at Bendigo Blvd in North Bend as the Snoqualmie levees prevent drainage to the river during high flows.
18	WLFL1 SF CIS LONG TERM	Upper Snoq	FCD Const				\$0	\$0	\$0	\$57,100,000	North Bend. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
19	WLFL1 SF CIS MED TERM	Upper Snoq	FCD Const				\$0	\$0	\$0	\$47,200,000	North Bend. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
20	WLFL1 SHAKE MILL LB 2016 REPAIR	Upper Snoq	FCD Const	\$3,139,161	\$2,939,114		\$200,047	\$0	\$200,047	\$3,139,161	North Bend. Total breach of levee - erosion and lateral channel migration is ongoing. No immediately adjacent private property or infrastructure. Continued erosion could threaten 428th Ave embankment or bridge.
21	WLFL1 SHAKE MILL RB 2016 REPAIR	Upper Snoq	FCD Const	\$672,229	\$676,384		(\$4,155)	\$4,155	\$0	\$676,384	North Bend. Between 428th St Bridge and Tate Creek, several locations on levee where toe-rock dislodged and corresponding minor bank erosion along 50-60 feet of river bank. Actual gaps range between 6-10 feet. Missing toe rock compromises levee integrity, increasing its vulnerability to further scour and potential failure. Failure of this facility could result in damage to a heavily used county road (428th Ave SE).
22	WLFL1 SR202 SF BRIDGE LENGTHEN	Upper Snoq	FCD Const				\$0	\$0	\$0	\$100,000	Near North Bend in unincorporated King County. Placeholder funding to partner with WSDOT to expand bridge SR202 opening over South Fork Snoqualmie River and Ribary Creek to improve conveyance and reduce upstream flood impacts. Supported by Near North Bend in unincorporated King County. Requires state or federal funding. Relative contribution of this project is being evaluated in the SF Snoqualmie Corridor Plan.
22	WLFL1 TATE CR SCOUR FEASIBILITY	Upper Snoq	Agreement			\$150,000	\$0	\$0	\$150,000	\$150,000	North Bend. Prepare a Concept Development Report (CDR) to analyze and select best span/alignment replacement bridge and road-raising option as the current bridge does not provide enough hydraulic opening due to the transport of sediments and water overtops the approaches during floods.
23	WLFL1 UPR SNO RES FLD MITGNT	Upper Snoq	FCD Acqu/Elev	\$17,020,350	\$12,553,741	(\$572,000)	\$4,466,609	(\$894,609)	\$3,000,000	\$24,216,741	Snoqualmie. This project will continue to acquire or elevate flood-prone structures in the Upper Snoqualmie basin to reduce the risk of flood, erosion, and channel migration damage. Partnership with City of Snoqualmie to elevate homes and cost-share acquisition of homes where City is planning to construct the Riverwalk project.
24	WLFL1 USACE PL 84-99 SF SNO	Upper Snoq	FCD Const	\$663,594	\$248,419		\$415,175	\$0	\$415,175	\$663,594	North Bend. Ensure eleven South Fork Snoqualmie River levees meet the standards of the US Army Corps of Engineers PL 84-99 program in order to receive future assistance from the Corps in the event of flood damage to the levees..
25	WLFL2 264TH AVE NE AT SR 202 FLD IMPRVMT	Lower Snoq	Agreement				\$0	\$0	\$0	\$540,000	Redmond. Alleviate flooding on this sole access road by replacing the existing culverts and raising the roadway to eliminate over-topping during flood events.
26	WLFL2 334TH AVE SE & SE 43RD PL FLD IMPRVMT	Lower Snoq	Agreement				\$0	\$0	\$0	\$500,000	Fall City. Improve drainage to alleviate neighborhood flooding by constructing a drainage system to flow to the Snoqualmie River.
27	WLFL2 CITY SNOQ HOME ELEVATIONS	Upper Snoq	Agreement	\$368,000	\$0	\$1,100,000	\$368,000	\$0	\$1,468,000	\$1,468,000	City of Snoqualmie. Elevate several flood-prone homes in the areas around Walnut St and Northern St.
28	WLFL2 DUTCHMAN RD REVETMENT	Lower Snoq	FCD Const	\$1,120,888	\$918,067	\$852,322	\$202,821	(\$436,303)	\$618,840	\$10,019,824	Duvall. Repair approximately 200 feet of revetment. Dutchman Road in this location provides the sole access to residences and business on the west side of the Snoqualmie Valley downstream of Duvall. Continued erosion of the revetment could result in erosion of the road (West Snoqualmie Valley Road NE) which would severely limit access to the downstream property owners during or following a flood event.
29	WLFL2 FALL CITY FLOODPLAIN RESTORATION	Lower Snoq	Agreement	\$300,000	\$66		\$299,934	\$0	\$299,934	\$300,000	Fall City. Project will reconnect floodplain, removing the aging Hafner and Barfuse facilities and replacing with modern flood and erosion protection features. FCD cost-share funding is intended for design of flood risk reduction features.

No.	Title	Basin	Type of project	2022 Inception to Date Budget	2022 Inception to Date Expenditure	2023 Adopted	2022 Carryover	2023 Reallocation Request	2023 Revised	Project Life Total	Comments	
30	WLFL2 FARM FLOOD TSK FORCE IMP	Lower Snoq	FCD Acqu/Elev	\$979,803	\$851,768		\$128,035	\$0	\$128,035	\$979,803	Carnation. This project provides technical and cost-sharing assistance to agricultural landowners in the Lower Snoqualmie floodplain to help them better withstand the impacts of flooding. Specific project actions include farm pads and elevation or flood proofing of agricultural structures.	
31	WLFL2 FISH HATCHERY RD BR #61B REPAIR	Lower Snoq	Agreement	\$514,000	\$204,503	\$186,000	\$309,497	\$0	\$495,497	\$700,000	Duvall. Strengthen the bridge structure to stabilize it after the most recent flood event, rebuild the east approach roadway to address the current issue and to protect it against major flood events in the future, and restore the eroded creek bed and riverbank profile to buffer the bridge against scour.	
32	WLFL2 JOY 2020 REPAIR	Lower Snoq	FCD Const	\$100,000	\$71,603		\$28,397	(\$28,397)	\$0	\$71,603	Duvall. Design and repair approximately 800 linear feet of bank erosion along the Joy Revetment on the left bank of the Snoqualmie River across from the City of Duvall. Bank erosion is undermining an existing road.	
33	WLFL2 L SNO 2019 BANK REPAIR	Lower Snoq	Agreement	\$2,200,000	\$1,078,929		\$1,121,071	\$0	\$1,121,071	\$2,200,000	Fall City. The river is scouring the road away and David Powell Road is collapsing into the river. This project will repair an existing failing revetment and extend MSE wall to prevent undercutting of the riverbank and roadway.	
34	WLFL2 L SNO/ALDAIR CORR DOR PLN	Lower Snoq	FCD Const	\$7,089,214	\$7,039,008	(\$50,207)	\$50,206	\$0	(\$1)	\$7,039,007	Fall City. The river is scouring the road away and David Powell Road is collapsing into the river. This project will repair an existing failing revetment and extend MSE wall to prevent undercutting of the riverbank and roadway.	
34	WLFL2 LWR SNO RESDL FLD MITGTN	Lower Snoq	FCD Acqu/Elev	\$4,005,156	\$3,272,960	\$550,971	\$732,196	\$1,036,450	\$2,319,617	\$8,092,577	Carnation. This project provides technical and cost-sharing assistance to residential and agricultural landowners in the Lower Snoqualmie floodplain to help them better withstand the impacts of flooding. Specific project actions include farm pads, elevations of homes, and elevation or flood proofing of agricultural structures.	
35	WLFL2 MUD CREEK SEDIMENT FACILITY	Lower Snoq	FCD Const	\$432,000	\$30,101		\$401,899	\$0	\$401,899	\$432,000	Snoqualmie. Design and permit a sediment facility to minimize sediment deposition, flooding, and channel avulsions at this site.	
36	WLFL2 PUMP STATION REVETMENT REPAIR	Lower Snoq	FCD Const			\$103,030	\$0	\$0	\$103,030	\$1,589,602	Snoqualmie. Reconstruct upstream 150 feet of the Pump Station Revetment to prevent scour damage to the facility which protects the City of Snoqualmie's Meadowbrook Pump Station.	
37	WLFL2 SNOQUALMIE VALLEY FEAS	Lower Snoq	Agreement	\$401,000	\$48,791	\$99,000	\$352,209	\$0	\$451,209	\$500,000	Duvall. Regional flooding in the Snoqualmie Valley cuts off access to eastern cities. Determine which major roadway(s) that cross the Snoqualmie Valley would be the most cost effective to improve in the valley with chronic flood issues impacting over 25,000 daily drivers.	
38	WLFL2 STOSSEL RB 2018 REPAIR	Lower Snoq	FCD Const	\$1,057,886	\$1,026,394		\$31,492	\$0	\$31,492	\$1,057,886	Carnation. This completed project repaired approximately 250 feet of damage identified in late March 2018 to a section of the Stossel Bridge Right Bank Revetment on the Snoqualmie River, downstream of the City of Carnation.	
39	WLFL2 STOSSEL REVETMENT	Lower Snoq	FCD Const	\$536,598	\$479,034	\$2,076,600	\$57,564	(\$1,956,120)	\$178,044	\$684,078	Carnation. Placeholder costs for long-term facility improvement project to prevent erosion undermining 310th Ave NE.	
40	WLFL2 TOLT PIPELINE PROTECTION	Lower Snoq	FCD Const	\$10,745,036	\$10,745,450			(\$414)	\$414	\$0	\$10,745,450	Carnation. This project will repair approximately 800 linear feet of the Winkelman (formerly RM 13.5) revetment. Erosion along the right bank of the Snoqualmie River channel threatens to undermine the Seattle Public Utilities water supply line at this location south of Duvall. Construction is complete.
41	WLFL3 HOLBERG 2019 REPAIR	Tolt	FCD Const	\$250,000	\$0		\$250,000	\$0	\$250,000	\$560,000	Carnation. Facility failure has consequences for property owners immediately landward of facility. Potential for high flows and erosive damage to residences and property.	
42	WLFL3 HOLBERG FEASIBILITY	Tolt	FCD Const	\$412,149	\$355,355		\$56,794	(\$17,304)	\$39,490	\$394,845	Carnation. Feasibility study to determine the nature and extent of levee improvements necessary to remove four homes in unincorporated King County from the regulatory Channel Migration Zone as mapped in the March 2017 Draft Tolt River Channel Migration study.	
43	WLFL3 LOWER FREW LEVEE SETBACK	Tolt	FCD Const	\$1,121,096	\$364,663	\$1,130,000	\$756,433	\$0	\$1,886,433	\$17,565,777	Carnation. Capital Investment Strategy. Design, based on level of service analysis, the highest priority levee setback for flood risk reduction. Phase 2 construction estimated in CIS at \$14.5M-\$16.7M	
44	WLFL3 LOWER TOLT RIVER ACQUISITION	Tolt	FCD Acqu/Elev	\$1,529,475	\$543,853	\$17,000	\$985,622	\$0	\$1,002,622	\$3,546,475	Carnation. Acquire high-priority flood risk reduction properties in the lower two miles of the Tolt River consistent with the adopted Capital Investment Strategy.	
45	WLFL3 RIO VISTA PROPERTY ACQ	Tolt	FCD Acqu/Elev	\$3,467,331	\$2,551,027	\$139,000	\$916,304	\$0	\$1,055,304	\$8,856,331	Carnation. Capital Investment Strategy: Acquire 2 at-risk homes from willing sellers; acquire remaining 14 homes as funds become available.	
46	WLFL3 SAN SOUCI NBRHOOD BUYOUT	Tolt	FCD Acqu/Elev	\$5,199,674	\$5,046,463	\$456,789	\$153,211	\$0	\$610,000	\$5,656,463	Carnation. This project will buyout remaining properties and remove all homes and privately-constructed rubble levee at upstream end of the community access road, ultimately completing project initiated 20 years ago by others. Approximately 20 homes removed from high hazard areas within and just upstream and downstream of San Souci neighborhood.	
47	WLFL3 SAN SOUCI ROAD ELEVATION	Tolt	FCD Const	\$725,000	\$52,284		\$672,716	(\$600,000)	\$72,716	\$7,109,980	Carnation. Capital Investment Strategy: Construct Tolt Road NE road elevation in one location. Remove illegal revetment and roads in San Souci neighborhood.	
48	WLFL3 SEDIMENT MGMT FEAS	Tolt	FCD Const	\$263,706	\$208,477		\$55,229	\$0	\$55,229	\$263,706	Carnation. Capital Investment Strategy: Conduct sediment management feasibility study and develop a plan. Update and include upper watershed sediment production estimates.	
49	WLFL3 SR 203 BR IMPRVMENTS FEAS	Tolt	FCD Const	\$395,900	\$187,453		\$208,447	\$0	\$208,447	\$395,900	Carnation. Capital Investment Strategy: Initiate study (with potential future design and construct) to add bridge span(s), raise the highway and relocate King County Parks parking area.	
50	WLFL3 TOLT CIS LONG TERM	Tolt	FCD Const				\$0	\$0	\$0	\$28,800,000	Carnation. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.	
51	WLFL3 TOLT CIS MED TERM	Tolt	FCD Const				\$0	\$0	\$0	\$56,250,000	Carnation. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.	
52	WLFL3 TOLT R LEVEE L.O.S. ANALYSIS	Tolt	FCD Const	\$1,055,467	\$934,090		\$121,377	\$77,484	\$198,861	\$1,132,951	Carnation. Capital Investment Strategy: Conduct a detailed hydraulic analysis to optimize the elevation of new levees to maximize flood risk reduction benefits.	
53	WLFL3 TOLT R NATURAL AREA ACQ	Tolt	FCD Acqu/Elev	\$4,922,258	\$3,771,655	(\$27,740)	\$1,150,603	\$313,137	\$1,436,000	\$6,007,655	Carnation. Capital investment strategy: acquire at-risk homes from willing sellers.	
54	WLFL3 GIRL SCOUT LEVEE SETBACK	Tolt	FCD Const			\$50,000		\$0	\$50,000	\$12,351,954	Carnation. Reduce neighborhood isolation from flooding. Evaluate feasibility of elevating sections of Tolt River Road.	
55	WLFL3 REMLINGER LEVEE IMPROVEMENTS	Tolt	FCD Const			\$87,459		\$0	\$87,459	\$1,543,400	Carnation. Reduce neighborhood isolation from flooding. Evaluate feasibility of elevating sections of Tolt River Road.	
56	WLFL3 TOLT R RD NE IMPROVEMENTS	Tolt	FCD Const				\$0	\$0	\$0	\$2,863,630	Carnation. Capital Investment Strategy: Initiate design for elevation of one road location to reduce or eliminate isolation. Implement additional road elevations as funds become available.	
57	WLFL3 UPPER FREW LEVEE SETBACK	Tolt	FCD Const	\$209,000	\$175		\$208,825	(\$158,825)	\$50,000	\$17,725,175	Carnation. Capital Investment Strategy: Initiate the levee setback design in order to apply for grant funding. Levee setback to increase sediment storage and floodwater conveyance; protect adjacent development; reduce damage to trail bridge.	
58	WLFL4 ALPINE MANOR NEIGHBORHOOD BUYOUTS	Raging	FCD Acqu/Elev	\$2,183,810	\$1,753,880		\$429,930	\$0	\$429,930	\$2,583,810	Preston. Acquisition of single-family homes and future acquisition of mobile home park at risk of channel migration along the Raging River in the Alpine Manor neighborhood.	
59	WLFL4 RAGING SCOUR REPAIR 2017	Raging	Agreement	\$80,000	\$25,062		\$54,938	\$0	\$54,938	\$80,000	Fall City. This bridge has a history of scour damage. One of the arch foundations is exposed. Repair scour mitigation measures to protect the footing. It serves only one house but is a designated King County Landmark.	
60	Snoqualmie-South Fork Skykomish Subtotal			\$101,075,290	\$76,357,510	\$12,509,010	\$24,717,782	(\$6,381,961)	\$30,844,831	\$425,090,751		
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63	WLFL5 ALLEN LK OUTLET IMPRVMENT	Sammamish	Agreement	\$845,000	\$81,479	\$36,256	\$763,521	\$0	\$799,777	\$2,791,256	Sammamish. To address chronic flooding on this sole access roadway with approximately 200 properties, look at upstream and downstream retention/detention options; study road-raising options; prepare Concept Development Report, analyze and select best options.	
64	WLFL5 GEORGE DAVIS CRK CITY OF SAMMAMISH	Sammamish	Agreement	\$400,000	\$0		\$400,000	\$0	\$400,000	\$400,000	Sammamish. This project will restore access to one river mile of high quality kokanee salmon habitat and reduce the risk of flooding by reducing sediment deposition.	
65	WLFL5 IRWIN R 2020 REPAIR	Sammamish	FCD Const	\$724,739	\$738,537		(\$13,798)	\$111,298	\$97,500	\$836,037	Issaquah. Further damage to the facility could cut off the sole access to one resident (via a private road and bridge over the creek).	
66	WLFL5 ISSAQUAH CREEK CIS	Sammamish	FCD Const	\$100,000	\$0	\$200,000	\$100,000	(\$100,000)	\$200,000	\$1,200,000	Issaquah: Identify and prioritize near-, mid-, and long-term capital projects for Flood Control District funding along Issaquah Creek.	
67	WLFL5 JEROME 2020 REPAIR	Sammamish	Agreement	\$355,083	\$15,319		\$339,764	\$0	\$339,764	\$355,083	Issaquah. The Jerome Revetment protects three private residences in the City of Issaquah. Erosion of the revetment could result in loss of property and damage to private utilities. Loss of bank in front of middle property. 70 linear feet (LF) of erosion.	
68	WLFL5 LK SAMMAMISH FLOOD MIT GRANTS	Sammamish	Grant	\$1,000,000	\$0		\$1,000,000	\$0	\$1,000,000	\$1,000,000	Bellevue. Provide near-term grants to fund flood mitigation options for lakeside landowners, such as floating docks, relocation or elevation of outbuilding and other damage-reduction and floodproofing measures. Established pursuant to FCDEM2021-3.	
69	WLFL5 MOMB 2020 REPAIR	Sammamish	FCD Const	\$327,670	\$225,090	\$716,721	\$102,580	(\$665,049)	\$154,252	\$387,342	Issaquah. Damage to the SE 156th St. road next flood season could cut off the sole access to a community of about 30 homes. More erosion at the downstream end of the facility may further destabilize the steep slope of the landslide and threaten downstream homeowners.	
70	WLFL5 SAMMAMISH CIS	Sammamish	FCD Const	\$1,752,520	\$757,483	\$615,881	\$995,037	\$0	\$1,610,918	\$2,916,747	Redmond: Identify and prioritize near-, mid-, and long-term capital projects for Flood Control District funding along the Sammamish River.	

No.	Title	Basin	Type of project	2022 Inception to Date Budget	2022 Inception to Date Expendiure	2023 Adopted	2022 Carryover	2023 Reallocation Request	2023 Revised	Project Life Total	Comments
71	WLFL5 WILLOWMOOR FLDPLAIN REST	Sammamish	FCD Const	\$4,520,977	\$3,760,423	\$284,915	\$760,554	(\$584,021)	\$461,448	\$4,221,871	Redmond. Willowmoor Floodplain Restoration Project seeks to reduce the frequency and duration of high lake levels in Lake Sammamish while maintaining downstream Sammamish River flood control performance and enhancing habitat. The project will reconfigure the Sammamish transition zone to ensure ongoing flow conveyance, downstream flood control, potential extreme lake level reduction, habitat conditions improvement, and reduction of maintenance impacts and costs. Project is currently on hold pending completion of a 3rd party review scheduled to be completed in December 2020. The 2021 funding shown here is a placeholder only pending the outcome of the review.
72	WLFL6 148TH AVE SE LARSEN LK BELLEVUE	Lk Wash Tribs	Agreement	\$400,000	\$314,798		\$85,202	\$0	\$85,202	\$400,000	Bellevue. Conduct a site assessment and initiate preliminary design to progress toward construction of best drainage treatments and resilient design to reduce or eliminate roadway flooding on 148th Ave SE. Improve high water flow capacity for Larsen Lake/Lake Hills Greenbelt to Kelsey Creek where it floods 148th Avenue SE during moderate to severe storm and longer duration rainfall periods.

No.	Title	Basin	Type of project	2022 Inception to Date Budget	2022 Inception to Date Expenditure	2023 Adopted	2022 Carryover	2023 Reallocation Request	2023 Revised	Project Life Total	Comments
73	WLFL6 BEAR CRK FLOOD EROSION REDMOND	Lk Wash Tribs	Agreement	\$1,550,000	\$128		\$1,549,872	\$0	\$1,549,872	\$1,550,000	Redmond. Protect Avondale Rd from an embankment that has been scoured by floodwaters from Bear Creek.
74	WLFL6 FACTORIA BLVD DRAINAGE	Lk Wash Tribs	Agreement	\$6,814,000	\$0		\$6,814,000	\$0	\$6,814,000	\$6,814,000	Bellevue. Reduce flooding during high-intensity storm events along Factoria Boulevard, a major transportation corridor within the City of Bellevue. These events have increased in frequency and are anticipated to be even more frequent in the future as a result of climate change.
75	WLFL6 ISSAQUAH TRIB FEAS	Lk Wash Tribs	Agreement	\$350,000	\$323,371		\$26,629	\$0	\$26,629	\$350,000	Issaquah. Prepare a feasibility analysis report which will include, but is not limited to, surveying, geotechnical analysis, traffic analysis, and hydraulic analysis to identify potential solutions to bridge deficiencies, including a constructed hydraulic opening with piles that collect debris and pose risks to the stability of the bridge.
76	WLFL6 LOWER COAL CRK PH I	Lk Wash Tribs	Agreement	\$11,561,592	\$11,482,126	\$285,000	\$79,466	\$0	\$364,466	\$14,588,950	Bellevue. Increase conveyance capacity at the five box culvert crossings. Disconnect local storm drainage outfall from Coal Creek and redirect them to Lake Washington. Implemented by City of Bellevue.
77	WLFL6 MAY VALLEY DRAINAGE IMPRVMT	Lk Wash Tribs	Agreement	\$530,000	\$270,747		\$259,253	\$0	\$259,253	\$530,000	Newcastle. As recommended in the May Creek Basin Plan, two sediment traps will be constructed on May Creek tributaries (Cabbage and Country Creeks) to limit sediment loading. FCD funding is for initial feasibility analysis, landowner outreach, and acquisition of property from willing sellers for a future sediment facility. 2020 funding is for permitting and project design.
78	WLFL7 BELMONDO 2020 REPAIR	Cedar	FCD Const	\$318,278	\$269,910	\$847,770	\$48,368	(\$774,248)	\$121,890	\$399,800	Renton. Critical facilities (Utilities, CRT, SR 169). Regional impact extents. Potential human injury from sudden change in conditions. Generally exposed bank - damage likely to occur next major high-flow event.
79	WLFL7 BRODELL 2020 REPAIR	Cedar	FCD Const	\$0	\$0	\$9,403	\$0	(\$9,403)	\$0	\$0	Renton. Residential land use and critical facilities (Utilities, CRT, SR 169). Regional impact extents. Potential human injury from sudden change in conditions. Damage may occur next flood season/likelihood increasing.
80	WLFL7 BYERS NEIGHBORHOOD IMPROVEMENTS	Cedar	FCD Const	\$220,000	\$7,954		\$212,046	\$0	\$212,046	\$220,000	Renton. Capital Investment Strategy: Take several actions to reduce flood risk including construction of an emergency egress route, acquisition of flood-prone homes, and possible elevation of neighborhood roads. The Cedar CIS will be reviewed by the District in 2021 in light of changed conditions from the 2020 flood disaster.
81	WLFL7 CDR PRE-CONST STRTGC ACQ	Cedar	FCD Acqu/Elev	\$8,330,532	\$5,275,660		\$3,054,872	\$0	\$3,054,872	\$15,469,411	Renton. This project will acquire strategic real estate upon which several large Flood Control District capital projects are dependent (Project J in the Capital Investment Strategy).
82	WLFL7 CEDAR CIS LONG TERM	Cedar	FCD Acqu/Elev				\$0	\$0	\$0	\$35,400,000	Renton. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
83	WLFL7 CEDAR CIS MED TERM	Cedar	FCD Acqu/Elev				\$0	\$0	\$0	\$22,000,000	Renton. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee.
84	WLFL7 CEDAR LEVEE SETBACK FEAS (Cedar Corridor Plan)	Cedar	FCD Const	\$1,987,587	\$1,853,360		\$134,227	(\$134,227)	\$0	\$1,853,360	Renton. This six-year flood risk reduction capital investment strategy will cover the Cedar River valley from Landsburg Road SE (River Mile 22) to Lake Washington. Project complete. Closeout in 2020.
85	WLFL7 CEDAR R DWNSTREAM 2024 IMPV	Cedar	Agreement		\$0		\$0	\$0	\$0	\$100,000	Renton. Improve Cedar Grove Road near Byers Road SE and alleviate roadway flooding by raising the road through the application of a thick layer of overlay.
86	WLFL7 CEDAR R TRAIL SITE 2	Cedar	Agreement	\$1,233,000	\$1,234,169			(\$1,169)	(\$1,169)	\$1,233,000	Renton. This emergency action will armor up to 300 feet river bank and construct a buried revetment to stabilize the bank and prevent further erosion to the most damaged portion. This emergency action and the subsequent extension are upstream of the CRT 2 revetment in an area referred to as "Zone B."
87	WLFL7 CEDAR RES FLOOD MITIGATION	Cedar	FCD Acqu/Elev	\$3,074,000	\$2,806,989	\$1,531,134	\$267,011	\$0	\$1,798,145	\$12,605,134	Renton. Implement projects identified in the Capital Investment Strategy, approved as policy direction by the Executive Committee. Project K on the CIS: Risk analysis has identified 53 homes as high risk from flooding and channel migration, but which are not mitigated by projects. Elevate or purchase approximately 2 homes per year.
88	WLFL7 CEDAR RVR GRAVEL REMOVAL	Cedar	Agreement	\$12,835,100	\$10,544,625		\$2,290,475	\$0	\$2,290,475	\$24,738,100	Renton. The project ensures the minimum required 100-year flood conveyance capacity along the lower 1.25 miles of the Cedar River. Project is a required maintenance action by the Army Corps of Engineers Section 205 Flood Control Project. Maintenance dredging took place in 2016. Project funding shown herein represent post construction mitigation monitoring and reporting as well as the planning and design of the next dredging project. Additional funding will be needed beyond 2026 to cover permitting, mitigation plan development, construction, mitigation and post-construction monitoring work associated with the next cycle of dredging.
89	WLFL7 CITY OF RENTON LEVEE CERTIFICATION	Cedar	Agreement	\$5,000,000	\$837,922		\$4,162,078	\$0	\$4,162,078	\$5,000,000	Renton. Levee improvements necessary to satisfy levee certification engineering recommendations.
90	WLFL7 CRT SITE 5 2020 REPAIR	Cedar	FCD Const	\$437,905	\$217,620	\$255,554	\$220,285	(\$125,444)	\$350,395	\$1,578,015	Renton. Erosion and scour have resulted in loss of toe and bank rock, oversteepened and undercut banks (some portions cantilevered). Scour has undermined numerous large trees, likely to fall into the channel likely resulting in further damage of the bank. Damage is observed along approximately 350 feet of facility, near the upstream end.
91	WLFL7 CRT SITE 5B 2020 REPAIR	Cedar	FCD Const	\$315,000	\$309,477	\$5,000	\$5,523	\$0	\$10,523	\$320,000	Renton. Erosion and scour have resulted in loss of toe and bank rock, oversteepened and undercut banks (some portions cantilevered). Scour has undermined numerous large trees, likely to fall into the channel likely resulting in further damage of the bank. Damage is observed along approximately 350 feet of facility, near the upstream end.
92	WLFL7 CRT2 ZONE D 2020 REPAIR	Cedar	Agreement	\$5,335,656	\$2,808		\$5,332,848	\$0	\$5,332,848	\$5,335,656	Renton. Critical facilities (Utilities, CRT, SR 169). Regional impact extents. Potential human injury from sudden change in conditions. Damage may occur next flood season/likelihood increasing. This damage is to the CRT 2 revetment downstream of the emergency repair site listed separately, area is referred to as "Zone D".
93	WLFL7 DORRE DON AVULSION ANALYSIS	Cedar	FCD Const	\$100,000	\$41,893		\$58,107	\$0	\$58,107	\$125,000	Renton. The main channel has avulsed into the previous left floodplain, leading to erosion of the channel bank, adjacent to 231st PI SE.
94	WLFL7 DORRE DON NBHOOD IMPRVMT	Cedar	FCD Const	\$800,000	\$0		\$800,000	\$0	\$800,000	\$800,000	Renton. Capital Investment Strategy: This project will acquire flood-prone homes per the Cedar CIS, as well as evaluate if changes to the levee and road elevation will result in meaningful flood risk reduction and to determine what level of protection can be provided. The study would also evaluate other structural improvements such as raising Lower Dorre Don Way SE upstream and downstream of the trail crossing and farther downstream near RM 16.3. The Cedar CIS will be reviewed by the District in 2021 in light of changed conditions from the 2020 flood disaster.
95	WLFL7 HERZMAN LEVEE SETBACK	Cedar	FCD Const	\$3,444,192	\$3,130,416	\$8,201,165	\$313,776	(\$7,932,890)	\$582,051	\$3,951,515	Renton. Capital Investment Strategy: Setback levee; excavate side-channel to reduce pressure on revetment; reconstruct, reinforce and/or extend revetment; acquire up to 5 properties.
96	WLFL7 ISSAQUAH MAY VALLEY IMPV	Cedar	Agreement	\$100,000	\$88,319		\$11,681	\$0	\$11,681	\$100,000	Issaquah. This project will construct improvements to the intersection which could be either a roundabout or additional travel lanes with a travel signal at the intersection of Issaquah Hobart Road SE and SE May Valley Road.
97	WLFL7 JAN RD LEVEE SETBACK	Cedar	FCD Const	\$15,949,856	\$14,658,251	\$26,204	\$1,291,605	\$0	\$1,317,809	\$15,976,060	Renton. Capital Investment Strategy: Suite of solutions to be determined as part of feasibility study. Includes raise road, partial removal of Jan Road levee, construction of side channel, and mitigation of at-risk properties. Construction phased for mitigation in 2021 and other improvements in 2023.
98	WLFL7 LOWER CEDAR FEASIBILITY STUDY	Cedar	Agreement	\$520,000	\$349,226		\$170,774	\$0	\$170,774	\$520,000	Renton. Capital Investment Strategy: Conduct feasibility study of Lower Cedar reach in City of Renton to 1) quantify economic damage potential 2) determine infrastructure modifications to improve flood resiliency and sediment storage potential, and 3) conduct cost-benefit analysis.
99	WLFL7 LOWER JONES ROAD NEIGHBORHOOD	Cedar	FCD Const	\$2,654,203	\$609,831		\$2,044,372	\$0	\$2,044,372	\$2,654,203	Renton. Capital Investment Strategy: Raise in place or setback Jones Road; excavate and stabilize right bank to increase conveyance capacity; reinforce one revetment; remove portion of another revetment; acquire 8 at risk properties Construction delayed to 2024 to accommodate Jan Rd construction in 2021 or 2022.
100	WLFL7 MADSEN CR CULVERT 2017	Cedar	Agreement	\$3,326,000	\$3,248,485		\$77,515	\$0	\$77,515	\$3,326,000	Renton. To address a culvert failure affecting approximately 10 properties, prepare Concept Development Report to analyze and select best culvert replacement and road-raising option; and analyze upstream and downstream retention/detention impacts.
101	WLFL7 MADSEN CR RENTON	Cedar	Agreement	\$635,000	\$597,161		\$37,839	\$0	\$37,839	\$635,000	Renton. Design and implement phase I improvements to Madsen Creek to achieve 100-year level flood protection for properties south of SR 169 and 25-year level flood protection for properties north of SR 169.
102	WLFL7 MAPLEWOOD FEASIBILITY STUDY	Cedar	FCD Const	\$490,246	\$477,246		\$13,000	\$0	\$13,000	\$490,246	Renton. Capital Investment Strategy: Conduct site specific landslide risk assessment study; conduct a feasibility study to evaluate opportunities to modify the Erickson Levee. Pending results of landslide hazard analysis, FCD will consider options for a project.
103	WLFL7 TABOR-CROWALL REVETMENT	Cedar	FCD Const	\$1,252,339	\$340,696	\$722,114	\$911,643	\$0	\$1,633,757	\$6,498,453	Renton. Critical facilities (Utilities, CRT, SR 169). Regional impact extents. Potential human injury from sudden change in conditions. Generally exposed bank along 200 feet - damage likely to occur next major high-flow event.
104	WLFL7 RIVERBEND MHP ACQ	Cedar	FCD Acqu/Elev	\$5,182,126	\$5,182,126		\$48,916	(\$48,916)	\$0	\$5,182,126	Renton. This project represents the Flood District contribution to a larger project that relocates mobile home park tenants and initiates preliminary engineering design for potential levee setback / realignment to reduce flood heights, velocities and channel migration risk in this reach. Disappropriate remainder after FCD portion of scope is complete.

No.	Title	Basin	Type of project	2022 Inception to Date Budget	2022 Inception to Date Expenditure	2023 Adopted	2022 Carryover	2023 Reallocation Request	2023 Revised	Project Life Total	Comments
105	WLFL7 SR 169 FLOOD REDUCTION	Cedar	FCD Const	\$5,485,588	\$5,237,371		\$248,217	\$0	\$248,217	\$5,485,588	Renton. Conduct feasibility study in coordination with WSDOT to evaluate flood risk reduction opportunities, such as elevating SR 169, upgrading the local drainage infrastructure, and / or installation of back flow prevention gates. Funding added in 2019 pending FCD decision to move forward with preliminary design.
106	Cedar-Sammamish Subtotal			\$110,258,189	\$75,291,019	\$13,737,117	\$35,016,089	(\$10,262,900)	\$38,490,306	\$210,337,956	
107											
108											
109	WLFL8 BRISCOE LEVEE SETBACK	Green	Agreement	\$23,330,271	\$21,376,494		\$1,953,777	\$0	\$1,953,777	\$23,330,271	Kent. Floodwall construction at four locations completed by the City of Kent. Final expenditures for the remainder of 2017 will include reimbursement for property acquisition and riparian plantings. The revised 2017 financial plan includes revenue of \$4.1 million for the sale of the Rivers Edge Business Park. Per FCD 2016-20 Section 6, this revenue makes expenditure authority available for the Lower Russell Levee Setback project. The Briscoe project will be closed out once the District's ILA with Kent expires in 2018.
110	WLFL8 BRPS CONTROL BLDG RPLCMT	Green	FCD Const	\$1,018,278	\$865,448	\$959,506	\$152,830	(\$833,772)	\$278,564	\$13,053,505	Renton. This project will design and build the second phase of renovations to the Black River pump station. Major components include replacement of the control building, replacement of the trash rake system, and replacement of the screen spray system.
111	WLFL8 BRPS FISH PASS IMPRVMENTS	Green	FCD Const	\$2,359,863	\$1,459,848	\$2,502,589	\$900,015	(\$1,273,330)	\$2,129,274	\$24,455,719	Renton. This project will design and build the fourth phase of renovations to the Black River pump station, revising and replacing the obsolete fish passage systems.
112	WLFL8 BRPS HIGH-USE ENGINES	Green	FCD Const	\$12,105,573	\$8,478,711	\$635,154	\$3,626,862	\$0	\$4,262,016	\$12,740,727	Renton. This project will design and build the first phase of renovations to the Black River pump station, replacing the three smaller pump engines which run much more frequently than the other, larger pump engines.
113	WLFL8 BRPS LARGE ENGINE REPLACEMENT	Green	FCD Const		\$0		\$0	\$0	\$0	\$7,466,849	Renton. This project will design and replace the large engines and overhaul the large pumps at the Black River pump station.
114	WLFL8 BRPS SEISMIC UPGRADES	Green	FCD Const	\$2,526,804	\$996,303	\$226,613	\$1,530,501	(\$474,268)	\$1,282,846	\$30,060,752	Renton. This project will strengthen and improve the structure and subsurface soils at the Black River Pump Station.
115	WLFL8 BRPS SUPPORT SYS UPGRADES	Green	FCD Const	\$1,565,268	\$1,081,782	(\$127,751)	\$483,486	\$48,922	\$404,657	\$5,295,148	Renton. This project will design and build the third phase of renovations to the Black River pump station, replacing support systems such as engine control panels, cooling systems, oilers and hoists.
116	WLFL8 COVINGTON CR BLACK DIAMOND	Green	Agreement	\$2,293,500	\$116,958		\$2,176,542	\$0	\$2,176,542	\$2,293,500	Black Diamond. Remove the three 6-foot diameter culverts where Lake Sawyer flows into Covington Creek and replace with a bridge to eliminate obstructions for water flow and allow passage for migrating salmon.
117	WLFL8 DESIMONE MAJOR REPAIR USACE	Green	Agreement	\$1,850,000	\$1,098,012	\$4,743,038	\$751,988	(\$4,966,186)	\$528,840	\$34,503,814	Kent. This project will assess the damaged section of Desimone Levee between the two new floodwall segments, and recommend possible options for repair. Only the conditions assessment is proposed for funding.
118	WLFL8 DYKSTRA 2022 REPAIR	Green	FCD Const	\$50,000	\$0	\$100,000	\$50,000	(\$140,000)	\$10,000	\$260,000	Repair scour and bank erosion and replace missing toe rock upstream of 2015 Corps of Engineers repair.
119	WLFL8 FORT DENT 2020 REPAIR	Green	FCD Const	\$578,710	\$166,239	\$540,223	\$412,471	\$0	\$952,694	\$4,683,934	Tukwila. Damage increases vulnerability of the heavily used regional Green River trail and regional soccer complex (Starfire) and Tukwila Park. Erosion increases vulnerability to trail and soccer fields.
120	WLFL8 FORT DENT US 2021 REPAIR	Green	FCD Const	\$398,825	\$175,386		\$223,439	(\$223,439)	\$0	\$175,386	Tukwila. This project will repair a damaged section of the levee that was caused by a falling tree and susceptible to further scour and erosion.
121	WLFL8 GALLIDYKSTRA 2020 REPAIR	Green	FCD Const	\$1,535,319	\$1,318,716	\$121,361	\$216,603	\$0	\$337,964	\$1,656,680	Auburn. Complete Phase 1 repair per a request from the City of Auburn. Elevate 3500 feet levee reach to meet FEMA levee certification requirements.
122	WLFL8 GREEN PRE-CONST ACQ	Green	FCD Acqu/Elev	\$17,577,724	\$4,517,325		\$13,060,399	\$0	\$13,060,399	\$42,577,724	Tukwila. This project will acquire strategic real estate upon which future large Flood Control District capital projects are dependent, thereby reducing risks to construction schedules for those projects.
123	WLFL8 GREEN R IMPROVEMENT 2024	Green	Agreement				\$0	\$0	\$0	\$100,000	Auburn. Improve SE Green Valley Road near SE Auburn Black Diamond Road and alleviate roadway flooding by raising the road through the application of a thick layer of overlay.
124	WLFL8 GREEN SCOUR REPAIR 2017	Green	Agreement	\$150,000	\$47,524		\$102,476	\$0	\$102,476	\$150,000	Auburn. This project will address scour damage to the bridge, which is on the primary through route of the Green River Valley Rd. The bridge is also a King County landmark.
125	WLFL8 HSB BREDA SETBACK - KENT	Green	Agreement	\$7,130,509	\$931,214	\$7,900,000	\$6,199,295	\$0	\$14,099,295	\$15,430,509	Kent. New project to implement interim SWIF adopted by Board of Supervisors. This project will reconstruct the Horseshoe Bend Levee at the Breda reach (RM 24.46-24.72) to a more stable configuration in order to reduce flood risk to the surrounding areas. The project will also raise levee crest elevations to contain the 500-year (0.2% annual chance) flood. This segment of the levee has the lowest factor of safety rating of the Horseshoe Bend levee.
126	WLFL8 HSB MCCOY REALIGNMENT	Green	Agreement	\$516,138	\$162,068	\$2,188,106	\$354,070	\$0	\$2,542,176	\$3,404,244	Kent. This USACE repair project replaces the SWIF capital project originally planned by the FCD. The repair project is anticipated to stabilize the failure of the levee slope, construct a ring levee around an isolated utility, and shift the alignment of the federal levee back to the City of Kent's secondary containment levee.
127	WLFL8 KENT AIRPORT RVTMNT 2022 REPAIR	Green	FCD Const	\$270,000	\$88,377	\$90,000	\$181,623	\$65,127	\$336,750	\$1,416,627	Kent. Stabilize the over-steepened bank and rock revetment that has been undercut by rotational bank failure.
128	WLFL8 LONES LEVEE RESTORATION	Green	Agreement	\$1,850,000	\$1,850,000		\$0	\$0	\$0	\$1,850,000	Auburn. Contribute the partial cost of a repair (\$500,000) to a \$5 million levee setback project. By relocating the levee, flood risks as well as future repair costs for the Flood Control District are reduced.
129	WLFL8 LOWER RUSSELL ACQ KENT	Green	Agreement	\$1,123,668	\$1,023,656		\$100,012	\$0	\$100,012	\$1,123,668	Kent. Acquisitions by the City of Kent for the Lower Russell levee setback project.
130	WLFL8 LWR GRN R CORRIDOR PLAN/EIS	Green	FCD Const	\$718,519	\$681,217	\$30,000	\$37,302	\$0	\$67,302	\$748,519	Kent. Lower Green River Corridor Planning and Environmental Impact Statement.
131	WLFL8 LWR RUSSELL LEVEE SETBACK	Green	FCD Const	\$57,965,925	\$54,958,542		\$3,007,383	\$0	\$3,007,383	\$57,979,169	Kent. Remove and replace the existing flood containment system of levee and revetments along the right (east) bank of the Green River between river mile 17.85 (S 212th St) and river mile 19.25 (S 231st Way) in the City of Kent to provide long-term flood protection and improve riparian and aquatic habitat. Increased expenditure authority to match interim SWIF adopted by Board of Supervisors.
132	WLFL8 MILWAUKEE LEVEE #2-KENT	Green	Agreement	\$19,400,000	\$2,249,325		\$17,150,675	\$0	\$17,150,675	\$19,400,000	Kent. Prepare an analysis and study of design and construction alternatives to provide flood protection, scour protection, enable levee certification and secure necessary land rights.
133	WLFL8 O'CONNELL REVETMENT 2021 REPAIR	Green	FCD Const	\$386,929	\$195,253	\$154,629	\$191,676	\$90,448	\$436,753	\$1,706,305	Kent. Stabilize the O'Connell revetment slope, and move or replace the road shoulder and guardrail. With the new capital project team now on board there is capacity to initiate this work in Q4 rather than Q1 2022.
134	WLFL8 OLD JEFF'S FARM REVETMENT	Green	FCD Const	\$901,721	\$304,868		\$596,853	(\$596,853)	\$0	\$304,868	Auburn. This project will conduct a feasibility analysis of channel migration hazards from river mile 21.1 to 21.7. Alternative selection is pending; alternative 1 is assumed as a placeholder.
135	WLFL8 RUSSELL RD UPPER KENT	Green	Agreement	\$6,082,173	\$6,065,056		\$17,117	\$0	\$17,117	\$6,082,173	Kent. Project is to improve the levee by providing a minimum of 3 feet of freeboard above the predicted 500-year flood event and improve slope stability. These segments of the Russell Road Upper Levee have over-steepened slopes and therefore lack adequate structural stability to provide adequate safety.
136	WLFL8 S 106TH ST DRAINAGE IMPVMNT	Green	Agreement	\$451,000	\$440,266		\$10,734	\$0	\$10,734	\$451,000	Burien. Replace an existing damaged and undersized pipe that runs under eleven properties to prevent stormwater flooding.
137	WLFL8 SIGNATURE POINTE REVETMENT	Green	Agreement	\$56,745,419	\$1,527,287	(\$38,440,255)	\$55,218,132	\$0	\$16,777,877	\$56,745,419	Kent. Project provides increased level of protection to 1.5 miles of Lower Green River Corridor. Alternative selected by Executive Committee.
138	WLFL8 TUK REVETMNT 2019 REPAIR	Green	FCD Const	\$500,000	\$450,624		\$49,376	(\$49,376)	\$0	\$450,624	Tukwila. Erosion and slumping of Tukwila Trail revetment caused by the recent Green River flood resulted in approximately 200 feet of damage to the revetment.
139	WLFL8 TUK-205 GUNTER FLOODWALL	Green	FCD Const	\$11,498,336	\$1,300,074	\$1,526,310	\$10,198,262	(\$4,477,930)	\$7,246,642	\$46,244,157	Tukwila. New project to implement interim SWIF adopted by Board of Supervisors. This project will construct a facility to bring this levee segment in compliance with certification requirements for structural stability and raise the levee to roughly the 500 year event.
140	WLFL8 TUK-205 RATOLO FLOODWALL	Green	FCD Const			\$250,000	\$0	(\$200,000)	\$50,000	\$1,600,000	Tukwila. New project to implement interim SWIF adopted by Board of Supervisors. This project will construct a 0.15 mile floodwall and sloped embankment to protect adjacent businesses from flooding. The floodwall alignment (including embankment slope, factors of safety, and necessary real estate) will be finalized during the project design phase.
141	WLFL8 TUK-205 USACE GACO REPAIR	Green	Agreement	\$13,676,421	\$969,950		\$12,706,471	(\$12,606,471)	\$100,000	\$4,633,950	Tukwila. US Army Corps led project to replace 3500 ft. of Tukwila 205 levee in-place replacement to bring up to 500-year level of protection per the adopted interim SWIF. The USACE will share remaining 2/3 of the cost; this allocation is the local share of 1/3 of total cost. Requires cooperation agreement.
142	WLFLS PUGET WAY CULVERT	Green	Agreement	\$1,800,000	\$1,573,529		\$226,471	\$0	\$226,471	\$1,800,000	Seattle. This project will replace an aging and undersized creek culvert under Puget Way SW in Seattle.
143	WLFLS S PARK DRAINAGE IMPROVEMENTS	Green	Agreement	\$17,105,000	\$16,486,341		\$618,659	\$0	\$618,659	\$17,105,000	Seattle. The South Park Drainage Conveyance Improvements Project will install a formal conveyance system in the streets, to get flows to the pump station. The conveyance improvements will work in conjunction with the Pump Station.
144	WLFLS SOUTH PARK PUMPSTATION	Green	Agreement	\$6,505,000	\$6,504,454		\$546	\$0	\$546	\$6,505,000	Seattle. Cost-share construction of pump station to reduce flooding in industrial area. Allocation of funds by year may be revised based on updated project schedule. Implemented by the City of Seattle.
145	Green-Duwamish Subtotal			\$271,966,893	\$139,460,844	(\$16,600,477)	\$132,506,046	(\$25,637,128)	\$90,268,441	\$447,785,238	

No.	Title	Basin	Type of project	2022 Inception to Date Budget	2022 Inception to Date Expendiure	2023 Adopted	2022 Carryover	2023 Reallocation Request	2023 Revised	Project Life Total	Comments
146											
147											
148	WLFL9 212TH AVE SE @ SR 164 FLD IMPRVMT	White	Agreement				\$0	\$0	\$0	\$190,000	Enumclaw. Improve the drainage system to alleviate neighborhood flooding. May require improvements outside of the road right-of-way.
149	WLFL9 212TH AVE SE MITIGATION	White	Agreement	\$65,000	\$0		\$65,000	\$0	\$65,000	\$65,000	Enumclaw. TBD
150	WLFL9 A STREET HESCOS	White	FCD Const	\$420,000	\$83,935		\$336,065	\$0	\$336,065	\$420,000	Auburn: Install temporary flood protection barriers (HESCOS) on both banks of the White River, upstream of the A Street Bridge in Auburn to address the increased flood risk due to ongoing sediment deposition.
151	WLFL9 ANDERSON PARK ACQUISITION	White	FCD Acqu/Elev	\$100,000	\$0		\$100,000	(\$100,000)	\$0	\$0	Enumclaw. Park is split by the White River; acquire undevelopable and inaccessible southern portion of park in Pierce County from the City of Enumclaw.
152	WLFL9 COUNTYLINE TO A STREET	White	FCD Const	\$23,926,129	\$23,896,323		\$29,806	\$0	\$29,806	\$23,926,129	Pacific. Reduces flood elevations that impact residential neighborhoods in the City of Pacific (200 homes, with \$52 million of assessed and \$13 million content value), improves sediment storage and enhances habitat.
153	WLFL9 RIGHT BANK LEVEE SETBACK	White	FCD Const	\$16,207,666	\$15,696,118	\$3,325,844	\$511,548	(\$2,337,392)	\$1,500,000	\$29,491,185	Pacific. Construct a new levee setback in the City of Pacific, extending from BNSF railroad bridge embankment to endpoint at Butte Ave. by White River Estates neighborhood.
154	WLFL9 SLIPPERY CREEK ACQ	White	FCD Acqu/Elev	\$116,261	\$116,261	\$55,000	\$0	\$0	\$55,000	\$171,261	Greenwater. In mid-2018 budget reallocation, funding was authorized to acquire a vacant property located outside flood hazard area on the north side of Highway 410. Subsequent site visits identified multiple unpermitted structures and a well; additional funding necessary to complete demolition and asbestos abatement at a remote and inaccessible location.
155	WLFL9 STREAM #10.0048 DS CULVERT	White	Agreement	\$45,000	\$0	\$555,000	\$45,000	\$0	\$600,000	\$1,650,000	Auburn. This project will analyze culvert replacement and road-raising options and implement the preferred option.
156	WLFL9 STREAM #10.0048 US CULVERT	White	Agreement	\$935,852	\$935,852	\$47,000	\$0	\$0	\$47,000	\$992,852	Auburn. This project will analyze culvert replacement and road-raising options and implement the preferred option.
157	WLFL9 STUCK R DR 2019 REPAIR	White	FCD Const	\$820,294	\$754,972		\$65,322	\$0	\$65,322	\$820,294	Auburn. Loss of facing rock along 130' of the lower half of the embankment. Some of the gravel fill under the rock has eroded as well, leaving a near-vertical face supporting the rock remaining on the upper slope. The rock that slid down is currently providing scour protection at the toe.
158	WLFL9 STUCK R DR FLOOD PROTECTION	White	FCD Const		\$0		\$0	\$0	\$0	\$1,000,000	Auburn. TBD
159	WLFL9 WHITE RIVER CIS	White	FCD Const			\$191,000	\$0	(\$191,000)	\$0	\$1,398,984	Auburn. Identify and prioritize near-, mid-, and long-term capital projects for Flood Control District funding along the White River.
160	White Subtotal			\$42,636,202	\$41,483,461	\$4,173,844	\$1,152,741	(\$2,628,392)	\$2,698,193	\$60,125,705	
161											
162											
163	WLFLG FLOOD REDUCTION GRANTS	Countywide	Grant	\$48,034,253	\$21,706,780	\$12,742,437	\$26,327,473	\$0	\$39,069,910	\$131,671,152	Competitive grant program for flood reduction projects. Increases as a proportion of total FCD tax revenue.
164	WLFLG WRIA GRANTS	Countywide	Grant	\$61,694,576	\$43,104,253	\$10,737,696	\$18,590,323	\$0	\$29,328,019	\$132,173,053	Cooperative Watershed Management Grant Program; priorities recommended by watershed groups. Increase based on assumed inflation rate.
165	WLFLM EFFECTIVENESS MONITORING	Countywide	FCD Const	\$6,306,324	\$5,348,254	\$633,839	\$958,070	(\$423,153)	\$1,168,756	\$10,821,330	Evaluation of capital projects to determine effectiveness and identify project design improvements.
166	WLFLM SUBREGNL OPPRTNTY FUND	Countywide	Grant	\$73,388,897	\$54,330,513	\$6,023,427	\$19,058,384	\$0	\$25,081,811	\$110,603,800	Allocation to all King County jurisdictions for flooding, water quality, or watershed management projects. Increases as a proportion of total FCD tax revenue.
167	WLFLX CENTRAL CHARGES	Countywide	FCD Const	\$1,313,643	\$1,427,644	\$200,000	(\$114,001)	\$214,001	\$300,000	\$2,727,644	Central charges related to the FCD's capital fund.
168	WLFLX COUNTYWIDE STRATEGIC ACQUISITIONS	Countywide	FCD Acqu/Elev			\$2,000,000		\$0	\$2,000,000	\$2,000,000	Acquire properties as directed by the Flood Control District.
169	WLFLX FLOOD WARNING CTR UPGRADES	Countywide	FCD Const			\$1,500,000		\$0	\$1,500,000	\$1,500,000	
170	WLFLX CONST MATERIALS STOCKPILE	Countywide	FCD Const	\$500,000	\$149,992		\$350,008	(\$350,008)	\$0	\$149,992	Stockpile role for future flood damage repairs.
171	WLFLX FLOOD EMERGENCY CONTGNCY	Countywide	FCD Const	\$1,419,042	\$419,042		\$1,000,000	\$0	\$1,000,000	\$1,419,042	Contingency for emergency response actions during a flood event.
172	Countywide Subtotal			\$192,656,735	\$126,486,477	\$33,837,399	\$66,170,257	(\$559,160)	\$99,448,496	\$393,066,012	
173											
174	Grand Total			\$718,593,309	\$459,079,311	\$47,656,893	\$259,562,915	(\$45,469,541)	\$261,750,267	\$1,536,405,663	